

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matters of	)	
	)	
GLOBALSTAR LICENSEE LLC	)	File No. SAT-MOD-20080904-00165
	)	File No. SAT-AMD-20091221-00147
Application for Modification of Non-geostationary	)	Call Sign: S2115
Mobile Satellite Service Space Station License	)	
	)	
GUSA LICENSEE LLC	)	File Nos. SES-MOD-20081023-01403
	)	SES-MFS-20091221-01601
Applications for Modification of Mobile Satellite	)	SES-MFS-20091221-01602
Service Earth Station Licenses	)	SES-AFS-20091221-01607
	)	SES-MFS-20091221-01608
	)	SES-MFS-20091221-01609
	)	SES-MFS-20091221-01610
	)	SES-MFS-20091221-01611
	)	SES-MFS-20091221-01612
	)	SES-AMD-20101108-01415
	)	SES-MFS-20091221-01613
	)	SES-AMD-20101108-01414
	)	SES-MFS-20091221-01614
	)	SES-AMD-20101108-01413
	)	SES-MFS-20091221-01615
	)	SES-AMD-20101012-01278
	)	SES-AMD-20101108-01412
	)	SES-MFS-20091221-01616
	)	SES-AMD-20101108-01411
	)	SES-AMD-20101025-01328
	)	SES-MFS-20091221-01617
	)	SES-AMD-20101025-01327
	)	SES-AMD-20101108-01410
	)	SES-MFS-20091221-01618
	)	SES-AMD-20101025-01326
	)	SES-AMD-20101108-01409
	)	Call Signs: E030266, E970381, E970199,
	)	E000342-E000345, E050345-347,
	)	E050097-050100
	)	
GCL LICENSEE LLC	)	File Nos. SES-MFS-20091221-01603
	)	SES-MFS-20091221-01604
Applications for Modification of Mobile Satellite	)	SES-MFS-20091221-01605
Service Earth Station Licenses	)	SES-MFS-20091221-01606
	)	Call Signs: E990335-337, E050237

**ORDER****Adopted:** March 18, 2011**Released:** March 18, 2011

By the Chief, International Bureau:

**I. INTRODUCTION**

1. In this Order, we modify licenses held by GUSA Licensee LLC for operation of fixed and mobile earth stations in the United States to permit those stations to transmit radio signals to, and receive transmissions from, second-generation Mobile-Satellite Service (“MSS”) space stations licensed by the Republic of France. The second-generation satellites will provide two-way voice and data communications with higher data rates than first-generation satellites and improved global and domestic coverage. We also modify the license held by Globalstar Licensee LLC for operation of first-generation MSS space stations to permit changes in their orbital deployment. These modifications will allow Globalstar to offer a variety of state-of-the-art mobile satellite services to existing and new customers in the United States over the next decade and beyond.

**II. BACKGROUND**

2. Globalstar Licensee LLC and GUSA Licensee LLC (collectively referred to as “Globalstar”) are wholly owned subsidiaries of Globalstar, Inc., a corporation organized under the laws of the state of Delaware. Pursuant to authority granted by the Commission, Globalstar operates a constellation of up to 48 first-generation “Big LEO” non-geostationary-orbit MSS space stations,<sup>1</sup> deployed at an altitude of 1414 kilometers.<sup>2</sup> Eight of Globalstar’s currently operational first-generation satellites were launched in 2007; the rest were launched between 1998 and 2000.

3. Globalstar’s first-generation space stations transmit to mobile earth stations in the 2483.5-2500 MHz frequency band and receive transmissions from mobile earth stations in the 1610-1618.725 MHz band. Globalstar has blanket authority that covers operation of mobile earth stations by end users throughout the United States, for communication with first-generation satellites. Further, Globalstar’s first-generation space stations are authorized to downlink in the 6900-7055 MHz band to fixed “feeder link” or “gateway” earth stations in several locations in the United States and to receive uplink transmissions from the feeder link stations in the 5096-5250 MHz band.<sup>3</sup> Globalstar operates the

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<sup>1</sup> Big LEO (Low Earth Orbit) MSS systems provide voice and data communications via non-geostationary satellites, using portions of the 1610-1626.5 MHz band for uplink transmissions from mobile terminals to satellites. The Commission has licensed two Big LEO systems – the Globalstar system and the Iridium system – for domestic and global operation. The Globalstar system is designed with Code Division Multiple Access architecture and uses the frequency bands specified above for uplink transmissions between satellites and mobile terminals. The Iridium system is designed with Time Division Multiple Access architecture and uses the 1617.775-1626.5 MHz band for transmission in both directions between satellites and mobile terminals.

<sup>2</sup> See SAT-MOD-20030606-00098, as amended by SAT-AMD-20050105-00003, granted Jan. 28, 2005.

<sup>3</sup> These feeder link earth stations are located in Clifton, Texas, Sebring, Florida, Wasilla, Alaska, and Cabo Rojo, (Continued ...)

U.S. feeder link stations under licenses granted by the Commission.<sup>4</sup> Globalstar's feeder link earth stations in Clifton, Texas also receive telemetry signals from Globalstar satellites in the 6875-6878 MHz band and transmit telecommand signals to the satellites in the 5091-5092 MHz band.

4. In its space station application, as originally filed in September 2008, Globalstar requested a license modification to permit it to launch and operate up to 48 second-generation space stations that would replenish, and ultimately replace, the first-generation constellation.<sup>5</sup> In an amendment filed on December 21, 2009, Globalstar informed the Commission that it had decided to seek authority for the second-generation satellites from France. Globalstar reported that its European subsidiary, Globalstar Europe SARL, filed a license application with the French Agence Nationale des Fréquences ("ANFR"). France subsequently filed a Coordination Request for the second-generation satellite system pursuant to the regulations of the International Telecommunication Union ("ITU").<sup>6</sup> On October 28, 2010, Globalstar obtained authority from ANFR to operate radio frequencies for the second-generation satellites.<sup>7</sup>

5. Deployment Plan Globalstar launched six second-generation satellites on October 19, 2010 and plans to launch 18 more within the next ten months. In addition to these 24 satellites, Globalstar has contracted for construction of another 24 second-generation satellites that will be kept as ground spares. The first 24 second-generation satellites will be deployed in a 32-satellite Walker constellation that will initially include the eight U.S.-licensed first-generation satellites that were launched in 2007.<sup>8</sup> This 32-satellite constellation will provide two-way voice and data communications.<sup>9</sup>

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Puerto Rico.

<sup>4</sup> See SES-MOD-19981112-01680, granted 5/2/2001; SES-LIC-20000706-01091, granted 3/22/2001; SES-LIC-20000706-01092, granted 3/22/2001; SES-LIC-20000706-01093, granted 3/22/2001; SES-LIC-20000706-01094, granted 3/22/2001; SES-MOD-20050728-01004, granted 10/17/2005; SES-MOD-20050728-01005, granted 10/17/2005; SES-MOD-20050728-01006, granted 10/17/2005; SES-LIC-20050728-01007, granted 10/17/2005; *GUSA Licensee, LLC., Applications to operate three new feeder link earth stations in Wasilla, Alaska*, 22 FCC Rcd 66 (2007); and *GUSA Licensee, LLC., Applications to operate four new feeder link earth stations in Sebring, Florida*, 22 FCC Rcd 61 (2007). Reception of downlinks in the 7025-7055 MHz segment is on an unprotected basis. Also see *GUSA Licensee, LLC, Order and Authorization*, DA 10-1974 (rel. Oct. 14, 2010) (granting authority for another fixed station in Clifton to transmit and receive high-power test signals to and from first-generation satellites in the frequency bands assigned for links with mobile terminals).

<sup>5</sup> File No. SAT-MOD-20040904-00165.

<sup>6</sup> The Coordination Request was published in BR IFIC 2674 (July 27, 2010).

<sup>7</sup> Globalstar filed a copy of the authorization as published on Nov. 6, 2010 in the *Journal Officiel de la République Française*. Letter with attachment to Mindel De La Torre, Chief, FCC International Bureau, from Samir Jain, Counsel to Globalstar Inc., filed Nov. 12, 2010 in File No. SAT-AMD-20091221-00147.

<sup>8</sup> Amendment to Application for Modification of Mobile Satellite Service Space Station License and Application for Modification of Mobile Satellite Service Earth Station and Mobile Earth Terminal Licenses, filed in SAT-AMD-20091221-00147 and SES-AFS-20091221-01601 *et seq.* ("Narrative Attachment to 12/21/2009 Amendment and Applications for License Modification") at 9. A Walker constellation is one in which the satellites are in circular orbits of the same period, distributed uniformly on the celestial sphere in orbital planes separated equally around a reference plane. M. Richharia, *Mobile Satellite Communications: Principles and Trends*, Pearson Education Ltd 2001, § 2.3.3.

When the eight satellites launched in 2007 reach the end of their service life or lose downlink capability, Globalstar will replace them with second-generation ground spares, thus keeping at least 32 satellites in operation with two-way communication capability.<sup>10</sup> In addition, Globalstar plans to re-deploy 16 older first-generation satellites in another Walker constellation, which will primarily provide one-way data communications.<sup>11</sup>

6. Globalstar will operate the second-generation satellites at the same orbital altitude, 1414 kilometers, as the first-generation Globalstar satellites and will have the same global service footprint.<sup>12</sup> Ground-level power flux density (“PFD”) from the second-generation satellites will be consistent with ITU and Commission requirements, according to Globalstar.<sup>13</sup> Although the French license grants authority for the space stations to receive transmissions from MSS terminals throughout the 1610-1626.5 MHz band, Globalstar states that its second-generation satellites will receive uplink transmissions from MSS terminals in the United States only in the 1610-1618.725 MHz band that the Commission has authorized in the first-generation satellite license.<sup>14</sup> Globalstar states that the second-generation satellites will use the same frequency bands as the first-generation satellites for downlink transmissions to MSS terminals, both inside and outside the United States, and for transmission to and reception from feeder link earth stations.<sup>15</sup>

7. Pending Applications Globalstar requests modification of its existing licenses in four respects. First, it asks the Commission to modify its licenses for fixed and mobile earth stations in the United States and U.S. territories to add authority to transmit to, and receive transmissions from, French-licensed second-generation Globalstar satellites, using the frequencies currently authorized for operation with first-generation satellites.<sup>16</sup> Second, Globalstar requests modification of its license for first-generation space stations to permit the eight satellites launched in 2007 to be re-positioned to operate in

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<sup>9</sup> Narrative Attachment to 12/21/2009 Amendment and Applications for License Modification at 15.

<sup>10</sup> *Id.* at 10.

<sup>11</sup> *Id.* at 9.

<sup>12</sup> Section 25.143(b)(2)(ii) and (iii) of the Commission’s rules, 47 C.F.R. § 1.43(b)(2)(ii) and (iii), requires Big LEO systems to be capable of providing service in any given location between 70° North latitude and 55° South latitude at least 75% of the time and of providing service at all times at locations throughout the United States, Puerto Rico, and the U.S. Virgin Islands. Globalstar certifies that the 32-satellite constellation including second-generation satellites will meet these requirements. Narrative Attachment to 12/21/2009 Amendment and Applications for License Modification at 21.

<sup>13</sup> Specifically, Globalstar states that ground-level PFD in the S Band will be kept below the coordination threshold levels approved at WRC-95 and that ground-level PFD in the C Band will be within the limits prescribed in 47 C.F.R. § 25.208(n). *Id.* at 16.

<sup>14</sup> *Id.* at 10-11 and 14-15. Globalstar states that the European Communications Office of the European Conference of Postal and Telecommunications Administrations recently decided to eliminate band segmentation in the Big LEO service-link bands, leaving it to the operators to coordinate their use of the bands between themselves. *Id.* at 7, citing *ECC Decision of 26 June 2009 on the Harmonisation of the bands 1610-1626.5 MHz and 2483.5-2500 MHz for use by systems in the Mobile-Satellite Service*, ECC/DEC(09)(02).

<sup>15</sup> Narrative Attachment to 12/21/2009 Amendment at 14-15.

<sup>16</sup> *Id.* at 12 and 14-15.

an integrated 32 satellite constellation along with 24 second-generation satellites.<sup>17</sup> Third, Globalstar requests space station license modifications to allow 16 older first-generation satellites to be repositioned in a separate Walker constellation.<sup>18</sup> Fourth, in anticipation of the expiration of its first-generation space station license, Globalstar requests modification of its blanket mobile-terminal license to include the authority for Ancillary Terrestrial Component operation consistent with that currently included in the space station license.<sup>19</sup>

8. Procedural History The application for modification of Globalstar's space station license, as originally filed, was placed on public notice in April 2009.<sup>20</sup> Iridium Satellite LLC ("Iridium"), the operator of the only other Big LEO MSS system, filed a petition to deny the application.<sup>21</sup> Iridium's system is authorized to operate in the 1617.775-1618.725 MHz band on a shared basis with Globalstar and in the 1618.725-1626.5 MHz band on an exclusive basis. Iridium argues in this petition, *inter alia*, that Globalstar continued to use the 1618.725-1621.35 MHz band for mobile-terminal operation in foreign countries after the Commission had reassigned that band exclusively to Iridium, and that Globalstar, therefore, is not qualified to be a Commission licensee.<sup>22</sup>

9. In December 2009, Iridium filed a motion to hold Globalstar's application, as then amended, in abeyance pending investigation and remediation of Globalstar's operation in the 1618.725-1621.35 MHz band, Globalstar's allegedly unauthorized operation of the satellites launched in 2007, and alleged violation by Globalstar of reporting and *ex parte* notification requirements.<sup>23</sup>

10. Globalstar's amended application for modification of its space station license and the associated applications for modification of earth station licenses were placed on public notice in March 2010.<sup>24</sup> Iridium filed a petition to deny these applications, maintaining that the applications should either

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<sup>17</sup> *Id.* at 12.

<sup>18</sup> *Id.* at 9-10 and 12. Globalstar does not specifically request any changes to its previously approved end-of-life and spare satellite plans for first-generation satellites. Accordingly, this *Order* does not modify the end-of-life disposal plan for first-generation satellites approved in File No. SAT-MOD-20030606-00098, as amended by File No. SAT-AMD-20050105-00003.

<sup>19</sup> *Id.* at 12. See *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-band, and the 1.6/2.4 GHz Bands; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Report and Order and Notice of Proposed Rulemaking*, 18 FCC Rcd 1962 (2003) at ¶245 (an MSS operator with foreign-licensed satellites may obtain authority for operation of ATC stations in the United States through modification of a U.S. earth-station license).

<sup>20</sup> Report No. SAT-00597 (Apr. 16, 2009).

<sup>21</sup> Petition to Deny of Iridium Satellite LLC, filed May 18, 2009. See also, Opposition of Globalstar Licensee LLC filed May 28, 2009, and Reply of Iridium Satellite LLC filed June 4, 2009.

<sup>22</sup> Iridium also argued that the application should be denied insofar as Globalstar requested authority to operate in spectrum above 1618.725 MHz and that statements in the application indicated that Globalstar was unable to finance construction and launch of a second-generation satellite constellation.

<sup>23</sup> Motion to Hold Globalstar's Applications in Abeyance, filed Dec. 31, 2009. Globalstar opposed the motion. See Opposition to Iridium's Motion to Hold Globalstar Applications in Abeyance, filed Jan. 11, 2010, and Reply of Iridium Satellite LLC in Support of Motion to Hold Globalstar Applications in Abeyance, filed Jan. 19, 2010.

<sup>24</sup> Report No. SAT-00673 (March 19, 2010); Report No. SES-01226 (March 17, 2010).

be denied or be granted subject to conditions<sup>25</sup> requiring coordination of the second-generation satellites pursuant to ITU regulations, barring Globalstar from operating in frequencies above 1618.725 MHz anywhere in the world, and making U.S. market access for the second-generation satellites contingent on grant of French authorization for Iridium mobile terminals to transmit in the 1617.775-1621.35 MHz band in French territory.<sup>26</sup>

11. On October 6, 2010, the Commission's Enforcement Bureau adopted a consent decree that terminated investigation of Globalstar's operation in the reassigned 1618.725-1621.35 MHz band and its operation of the spare satellites launched in 2007.<sup>27</sup> The Bureau concluded that the investigation "raise[d] no ... material questions ... as to whether Globalstar possesses the basic qualifications, including those related to character, to hold or obtain any Commission license or authorization."<sup>28</sup>

12. On October 12, 2010, Globalstar amended its pending applications to request partial waiver of the requirement in Section 25.283(c) of the Commission's rules concerning discharge of stored energy sources at a satellite's end of life, and to provide supplemental information regarding end-of-life satellite disposal.<sup>29</sup> Globalstar filed additional amendments on October 12 and October 25, 2010 to request authority for its feeder link stations in Sebring, Florida to transmit telecommand signals to, and receive telemetry signals from, both first-generation and second-generation satellites.<sup>30</sup>

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<sup>25</sup> Petition to Deny of Iridium Satellite LLC, filed Apr. 16, 2010 ("Iridium Petition to Deny"). *Also see* Opposition of Globalstar to Petition to Deny, filed Apr. 26, 2010, and Reply of Iridium Satellite LLC, filed May 3, 2010. Iridium raised a similar objection in a pleading filed before the amended space station application and the applications for U.S. market access were placed on public notice. Opposition of Iridium Satellite LLC, filed Dec. 31, 2009. Globalstar requested, and received, permission to withhold a substantive response until the time for filing in opposition to pleadings filed after issuance of a public notice of acceptance for filing. Action of the Chief, Satellite Policy Branch (Jan. 13, 2010), announced in Public Notice DA 10-89 (Jan. 15, 2010).

<sup>26</sup> In September 2010, Globalstar requested Special Temporary Authority ("STA") for fixed stations in Clifton, Texas and Sebring, Florida to communicate with the six second-generation satellites scheduled for launch on October 19, 2010, for post-launch testing, telecommand, and telemetry. After ascertaining that ANFR authorized interim operation of those satellites, we granted the requested STAs for 60 days, commencing on October 18. Action by the Chief, Satellite Engineering Branch in File Nos. SES-STA-20100922-01188, SES-STA-20100922-01189, and SES-STA-20100927-01214 (Oct. 14, 2010). We subsequently granted another 60-day STA for four more stations in Clifton to communicate with those six satellites for the same limited purposes. Action by the Chief, Systems Analysis Branch in File Nos. SES-STA-20101021-01314-17 (Oct. 27, 2010). All of the STAs were granted on a non-interference, unprotected basis.

<sup>27</sup> *Globalstar Licensee, LLC and GUSA Licensee, LLC*, DA 10-1807 (rel. Oct. 6, 2010) ("*Consent Decree Order*").

<sup>28</sup> Consent Decree at ¶4. The Enforcement Bureau stipulated that in the absence of new material evidence it would not take any further action against Globalstar or institute any proceeding regarding its basic qualifications based on information developed in the investigation. Globalstar agreed to contribute \$275,000 to the Federal Treasury and take certain specific steps to ensure that its future actions will be in compliance with the requirements of the Communications Act, the Commission's rules, and Commission orders. *Id.* at ¶¶ 11-13.

<sup>29</sup> Amendment to Application for Modification of Mobile Satellite Service Earth Stations and Mobile Earth Terminal Licenses, filed in SAT-MOD-20080904-00165 and SAT-AMD-20091221-00147 ("10-12-2010 Amendment").

<sup>30</sup> File Nos. SES-AMD-20101012-01278, SES-AMD-20101025-01326, SES-AMD-20101025-01327, and SES-AMD-20101025-01328. These amendments were placed on public notice on Oct. 27, 2010 (Report No. SES- (Continued ...))



### III. DISCUSSION

#### A. Basic Qualifications

13. Iridium argues that Globalstar has engaged in misconduct of such a serious nature that an investigation should be conducted, prior to disposition of the pending applications, to determine whether Globalstar is fit to be a Commission licensee.<sup>31</sup> Specifically, Iridium maintains that Globalstar: 1) launched eight spare satellites in 2007 and subsequently operated them without prior authority from the Commission; 2) continued to use the 1618.725-1621.35 MHz band for uplink transmissions in foreign countries after the Commission modified Globalstar's space station license to reassign that spectrum to Iridium; 3) failed to promptly inform the Commission that it was applying to ANFR for authority for its second-generation satellites; and 4) failed to comply fully with *ex parte* notification requirements triggered by a meeting between Globalstar representatives and International Bureau staff in December 2009.

14. As previously noted, the first two matters were investigated by the Commission's Enforcement Bureau, which found that they raised no material question as to Globalstar's basic qualifications.<sup>32</sup> Consequently, there is no need for further evaluation of these two matters in this Order.

15. The third matter – failure to promptly inform the Commission of the application to ANFR – allegedly involves a violation of Section 1.65(a) of the Commission's rules.<sup>33</sup> Section 1.65(a) states that when information in a pending application “is no longer substantially accurate and complete in all significant respects,” the applicant must either amend within 30 days to correct the inaccuracy or furnish the missing information, or show good cause for not doing so. Section 1.65(a) also states that unless good cause is shown, an applicant must notify the Commission within 30 days of any change of circumstance of decisional significance with respect to disposition of its application. Iridium contends that Globalstar violated this rule by failing to inform the Commission within 30 days that it was applying for a French license for its second-generation satellites, which rendered its pending application for a U.S. license for those satellites substantially inaccurate and incomplete.<sup>34</sup> Globalstar filed its application to ANFR on May 15, 2009<sup>35</sup> but did not amend its pending space station application until six months later, on December 21, 2009. Iridium contends that the Commission should investigate whether Globalstar deliberately delayed disclosure.<sup>36</sup>

16. Globalstar contends that there was no Section 1.65(a) violation because there was

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01290). On November 8, 2010, Globalstar filed another set of amendments to request authority for its feeder link stations in Sebring and Wasilla to receive feeder downlinks from second-generation satellites in the 7025-7055 MHz band on an unprotected basis. File Nos. SES-AMD-20101108-01409 through SES-AMD-20101108-01415. The November 8 amendments will be addressed separately.

<sup>31</sup> See Opposition of Iridium Satellite LLC, *supra*, and Motion to Hold Globalstar Applications in Abeyance, *supra*.

<sup>32</sup> See n.28, *supra*.

<sup>33</sup> 47 C.F.R. § 1.65(a).

<sup>34</sup> Motion to Hold Globalstar Applications in Abeyance at 7.

<sup>35</sup> Opposition of Globalstar to Petition to Deny at 10.

<sup>36</sup> Motion to Hold Globalstar Applications in Abeyance at 7.

good cause for the timing of the amendment. Globalstar explains that it did not file an amendment within 30 days after filing the application to ANFR because it needed more time in which to resolve difficult technical issues related to, among other things, the ultimate configuration of its second-generation system, how U.S.-licensed first-generation satellites would be used after the second-generation satellites were launched, what changes in the deployment of the first-generation satellites would be entailed, and how such re-deployment could be implemented without disrupting existing service. Globalstar asserts that until those technical issues were resolved, it could not determine what modifications to request to its first-generation satellite license or provide the technical information required in an amended application for such modification.<sup>37</sup> Globalstar asserts that after filing the application with ANFR, it had an overriding incentive to secure grant of Commission authority necessary for implementation of its plan as soon as possible. We find Globalstar's explanation for the timing of the amendment reasonable, and we have no evidence that it deliberately delayed disclosure. We therefore conclude that these circumstances do not raise a substantial question as to Globalstar's basic qualifications to be a Commission licensee.

17. We now turn to Iridium's contentions regarding violation of *ex parte* notification requirements. Section 1.1206(b)(2) of the Commission's rules<sup>38</sup> states that a person who makes an oral *ex parte* presentation of information or arguments not presented in a document previously filed by that person in the same proceeding must, within one business day after the presentation, submit a summary memorandum to the Commission's Secretary and provide a copy to each Commission employee who attended the oral *ex parte* presentation. The memorandum must provide "a summary of the substance of the *ex parte* presentation and not merely a listing of the subjects discussed." Also, the memorandum must clearly identify the proceeding, or proceedings, to which the *ex parte* presentation pertained.

18. On December 10, 2009, Globalstar's counsel filed a letter referencing Globalstar's pending space station modification application (File No. SAT-MOD-20080904-00165), reporting that on December 9, 2009 named representatives of Globalstar met with named Commission employees and that "[a]mong other issues, during the meeting Globalstar discussed the above-referenced application proceeding, including its plans to amend that application in the next several days to update the Commission on Globalstar's planned deployment of its second-generation constellation."<sup>39</sup> On December 15, 2009, Globalstar's counsel filed another letter referencing the same application, attaching a Powerpoint presentation that was distributed at the December 9 meeting.<sup>40</sup> Iridium contends that these letters did not meet all the requirements of Section 1.1206(b)(2). Specifically, Iridium maintains that the December 10 letter did not summarize the substance of the *ex parte* presentation in sufficient detail; that neither the December 10 nor the December 15 filing identified all of the proceedings discussed in the *ex parte* meeting;<sup>41</sup> that Globalstar did not provide copies of the December 10 letter to any of the Commission employees who attended the *ex parte* presentation and did not provide copies of the December 15 letter to all of them; and that the PowerPoint document was not filed within one day after

<sup>37</sup> Opposition to Iridium's Motion to Hold Globalstar Applications in Abeyance at 8.

<sup>38</sup> 47 C.F.R. § 1.1206(b)(2).

<sup>39</sup> Letter to the FCC Secretary from Samir C. Jain, Counsel to Globalstar, filed Dec. 10, 2009.

<sup>40</sup> Letter with attachment to the FCC Secretary from Samir C. Jain, Counsel to Globalstar, filed Dec. 15, 2009.

<sup>41</sup> Iridium notes that the PowerPoint presentation attached to the Dec. 15 letter referred to a pending request for special temporary authority (File No. SAT-STA-20070713-00098) and a request for waiver (File No. SAT-MOD-20080516-00106) not referenced in the Dec. 10 letter or the Dec. 15 letter.



the December 9 presentation.<sup>42</sup>

19. In response, Globalstar asserts that the primary purpose of the December 9 meeting was to introduce key Globalstar personnel to the new Chief of the International Bureau and acquaint her with the company's operations.<sup>43</sup> While acknowledging that certain pending applications were mentioned, Globalstar states that it did not discuss the merits of any pending proceeding during the meeting. Hence, Globalstar maintains that there was no requirement to file an *ex parte* notification for that meeting. Nevertheless Globalstar states that it filed a summary of the meeting the next day "out of an abundance of caution" and subsequently filed a copy of the PowerPoint document in response to an inquiry from one of the Commission employees who had participated in the meeting. In any case, Globalstar contends Iridium was not prejudiced by any lack of information as to the December 9 meeting, because Globalstar filed the PowerPoint document providing a detailed summary well before Iridium filed any further pleading.<sup>44</sup> In reply, Iridium argues that it is irrelevant whether there was prejudice, as there is no exception in the *ex parte* notification rules for instances where no prejudice results.<sup>45</sup>

20. The issue to be resolved here is not whether Globalstar failed to comply fully with *ex parte* notification requirements with regard to the presentation on December 9, 2009 but whether the circumstances to which Iridium calls attention raise a substantial question as to Globalstar's basic qualifications to be a Commission licensee. We find that they do not. Globalstar's contention that it was not required to file an *ex parte* notification is not unreasonable, as there is no indication in the PowerPoint document that the merits of pending proceedings were discussed in the December 9<sup>th</sup> meeting. In any event, the filing of the Powerpoint document provided ample notice of the subjects of the discussion in that meeting, and Iridium has not alleged that Globalstar violated *ex parte* notification requirements in any other instance.

## **B. Globalstar's Request for Market Access**

21. Most of Globalstar's pending applications involve requests to modify the licenses for U.S. earth stations to allow those stations to transmit to, and receive transmissions from, French-licensed second-generation satellites for provision of mobile satellite services.<sup>46</sup> In the "DISCO II" rulemaking, the Commission adopted a comprehensive framework for evaluating requests for U.S. market access for foreign-licensed satellites. The DISCO II policy implemented U.S. treaty obligations under the World Trade Organization Agreement on Basic Telecommunications Services ("WTO Basic Telecom Agreement").<sup>47</sup> As a signatory to the WTO Basic Telecom Agreement, the United States committed to

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<sup>42</sup> Motion to Hold Globalstar Application in Abeyance at 8-9.

<sup>43</sup> Opposition to Iridium's Motion to Hold Globalstar Application in Abeyance at 9.

<sup>44</sup> *Id.* at 10.

<sup>45</sup> Reply of Iridium Satellite LLC in Support of Motion to Hold Globalstar Applications in Abeyance at 7, n.42.

<sup>46</sup> As indicated by previous discussion, some of the subject earth-station applications also request authority for telecommand, telemetry, and test transmissions to and from the French-licensed satellites.

<sup>47</sup> See *Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States (Report and Order)*, 12 FCC Rcd 24094 (1997) ("DISCO II Report and Order"), and *Amendment of the Commission's Space Station Licensing Rules and Policies (First Report and Order)*, 18 FCC Rcd 10760 (2003), at ¶¶ 285-329.

grant U.S. market access for provision of MSS and Fixed-Satellite Service (“FSS”) to satellite operators licensed by other WTO-member countries on a non-discriminatory basis.<sup>48</sup> In keeping with that commitment, the Commission adopted a policy that granting market entry for provision of FSS or MSS via satellites licensed by a WTO-member country will be presumed to be beneficial for competition in the United States.<sup>49</sup>

22. The presumption that market entry by a WTO-member-licensed satellite operator will promote competition in the United States may be rebutted by a persuasive showing that allowing market entry would, on the contrary, cause competitive harm in the U.S. market for satellite services.<sup>50</sup> The Commission said in this regard that:

[w]here necessary to constrain the potential for anticompetitive harm in the U.S. market for satellite services, we reserve the right to attach additional conditions to a grant of authority, or, in the exceptional case, in which grant would pose a very high risk to competition, to deny an application. Prospective circumstances that could give rise to competition concerns include ... market concentration, discrimination, below average variable cost pricing, monopoly supply of service ... or where the applicant has market power and could use that power to raise prices and limit output in the U.S. satellite market.<sup>51</sup>

The Commission also said that an application for authority for a U.S. earth station to communicate via a WTO-member-licensed satellite could be denied in a case where the applicant has violated Commission rules or U.S. laws against anti-competitive behavior, fraud, or other criminal conduct, consistent with the Commission’s basic character qualification standard.<sup>52</sup>

23. In light of Globalstar’s past operation in spectrum that had been reassigned to Iridium, Iridium requests that we attach a variety of conditions to any market access grant for the second-generation satellites. Iridium contends that these conditions are needed to “protect the effectiveness” of Commission orders that reassigned the 1618.725-1621.35 MHz band from Globalstar to Iridium;<sup>53</sup> to motivate French authorities to allow Iridium mobile terminals to operate in the 1618.725-1621.35 MHz band from within French territory;<sup>54</sup> and to compel Globalstar to coordinate its second-generation system

<sup>48</sup> See *DISCO II Report and Order* at ¶¶ 19-27.

<sup>49</sup> *Id.* at ¶¶ 7, 29, and 39. A favorable finding regarding competitive effect does not foreclose consideration of other public interest factors. Such other factors as spectrum availability, eligibility requirements, operating requirements for prevention of harmful interference, national security, law enforcement, foreign policy, and trade issues may also be taken into account in deciding whether granting market access to a foreign-licensed satellite operator will serve the public interest. *Id.* at ¶29.

<sup>50</sup> *Id.* at ¶41.

<sup>51</sup> *Id.*

<sup>52</sup> *Id.* at ¶42.

<sup>53</sup> Iridium Petition to Deny at 7-9. See *Globalstar Licensee LLC et al., Modification of Authority to Operate a Mobile Satellite System in the 1.6 GHz Frequency Band (Order Proposing Modifications)*, 23 FCC Rcd 7984 (2008), and *Globalstar Licensee LLC et al., Modification of Authority to Operate a Mobile Satellite System in the 1.6 GHz Frequency Band (Order of Modification)*, 23 FCC Rcd 15207 (2008) (“*License Modification Order*”).

<sup>54</sup> Iridium Petition to Deny at 9-12.

with the Iridium system pursuant to ITU regulations.<sup>55</sup>

24. Specifically, Iridium contends that grant of U.S. market access for Globalstar's second-generation satellites should be conditioned on the following requirements:

(1) Globalstar must certify within 30 days of grant that no Globalstar satellite or earth station is operating in the 1618.725-1621.35 MHz band, either inside or outside the United States, or will operate in this spectrum without Commission authority;

(2) Globalstar must submit proof within one year of grant that all members of the European Union have granted authority for Iridium mobile earth stations within their territory to operate in all of the service-link spectrum assigned to Iridium by the Commission, including the 1617.775-1621.35 MHz segment;

(3) The Commission must determine within one year of grant that there is effective competitive opportunity for Iridium to provide service in France;

(4) Within three months of grant and every six months thereafter, Globalstar must submit evidence that it has been operating in compliance with the terms of its Commission authorizations, including the bandwidth restriction in proposed condition (1), above, both for first-generation and second-generation operation;

(5) In the event France grants authority for second-generation Globalstar satellites to operate in service-link spectrum assigned exclusively to Iridium by the Commission (*i.e.*, 1618.725-1626.5 MHz), the Commission shall grant Iridium reciprocal authority to operate in the 1610-1617.775 MHz spectrum that is currently assigned exclusively to Globalstar;

(6) Operation of second-generation Globalstar satellites licensed by France must be coordinated with respect to U.S.-licensed satellites with higher ITU priority.<sup>56</sup>

25. We do not agree that any of these proposed conditions is warranted. In requesting Conditions (1) and (4), as they apply to second-generation operation, Iridium is asking us to restrict U.S. market access to limit the range of spectrum that may be used for uplink transmissions from earth stations in other countries to space stations licensed by another sovereign government. This order is not a suitable vehicle for imposing such a restriction. Any concern regarding the potential impact of transmissions to second-generation Globalstar satellites from earth stations outside the United States on Iridium's global operations are properly addressed through the ITU international coordination process.<sup>57</sup>

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<sup>55</sup> *Id.* at 12.

<sup>56</sup> Iridium Petition to Deny at 13.

<sup>57</sup> The international coordination process is governed by procedural rules prescribed in Articles 9 and 11 of the ITU's Radio Regulations, which have the force of treaty among the ITU member nations, including France and the United States. The first step in the process is the filing of an Advance Publication Information ("API") with the ITU's Radiocommunications Bureau ("BR") by an administration proposing to license operation of a new satellite network. The API describes the general characteristics of the proposed system and specifies the frequency bands in which it would operate. The BR publishes the information in an International Frequency Information Circular ("IFIC"). Within two years after filing the API and before the satellite system commences operation, the notifying

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Pursuant to ITU regulations, Globalstar's second-generation satellite operations will be on a non-interference, unprotected basis with respect to Iridium's operations if international coordination with respect to the Iridium system is not completed.<sup>58</sup> The hypothetical concern reflected in proposed Condition (5) is also properly addressed through the international coordination procedure. Consequently, even if it were appropriate to impose these conditions in this order, there would be no need to do so.

26. Further, we are not persuaded that imposition of any of Iridium's proposed conditions is necessary to avert a high risk of harm to competition in the United States. To rebut the presumption in favor of U.S. market entry, it must be shown that granting entry "would cause competitive harm in the United States satellite [services] market."<sup>59</sup> The Commission indicated that any of the following could raise concern in this regard: market concentration, discrimination, below average variable cost pricing, monopoly supply of service, or market power to raise prices while limiting output.<sup>60</sup> Iridium does not contend that imposing the conditions it requests is necessary to prevent any such harmful effect(s) on competition in the U.S. satellite-services market. Rather, Iridium asserts that French authorities have impaired its ability to compete *in France* by withholding authority for earth stations in France to communicate with Iridium satellites in the 1617.775-1621.35 MHz portion of the Big LEO service-link band.<sup>61</sup> As reflected in proposed Condition (2), Iridium urges the Commission to use its authority over access to the U.S. market as leverage to compel the government of France to allow Iridium to use this additional spectrum for transmission between Iridium satellites and mobile earth stations in France.<sup>62</sup> It

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administration files a Request for Coordination, which specifies the system's planned operating parameters in more detail. If the Request includes all the necessary information the BR publishes it in another IFIC. An administration that has licensed a satellite system with frequency assignments previously registered with the ITU that could receive harmful interference from the proposed system can claim a right to coordination by filing an objection to the Request for Coordination within four months after its publication. The requesting and objecting administrations attempt to resolve potential interference issues through bilateral negotiations. If they reach agreement, the requesting administration apprises the BR of any technical changes that the agreement requires. If the BR determines that the proposed operation would be consistent with ITU regulations and that the requesting administration pursued coordination in accordance with the prescribed procedure, the new system's frequency assignments are recorded in the ITU's Master International Frequency Register. The newly registered system must operate in accordance with any coordination agreement negotiated pursuant to Article 9 and will be entitled to protection from interference from subsequently notified systems, unless permitted by the terms of other coordination agreements. If negotiation with an objecting administration under Article 9 proves unsuccessful, the new system may not cause harmful interference to the previously registered system to which the objection pertained and will not be entitled to protection from interference caused by the other system.

<sup>58</sup> See ITU Radio Regulations, Article 11.31.1. In response to the French coordination request for the second-generation Globalstar system, the Commission notified the ANFR and the ITU's Radiocommunication Bureau on Oct. 22, 2010 that the U.S. administration would withhold consent pending coordination with respect to the Iridium system and certain other U.S.-licensed satellite systems.

<sup>59</sup> *DISCO II Report and Order* at ¶41.

<sup>60</sup> *Id.*

<sup>61</sup> Iridium Petition to Deny at 10.

<sup>62</sup> Globalstar notes that France and other European countries have been reluctant to grant authority for Iridium earth stations within their jurisdiction to operate on frequencies below 1621.35 MHz because of the potential for Iridium downlink transmissions to interfere with radio astronomy observation. Opposition of Globalstar to Petition to Deny at 18-20, citing, *inter alia*, German Report of Harmful Interference referenced in *ex parte* filing in IB Docket 02-364

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would be inappropriate for us to interfere with sovereign decisions of this sort absent a showing that they lead to competitive harm in the U.S. market.

27. In sum, Iridium has not rebutted the presumption that allowing U.S. earth stations to communicate with second-generation Globalstar satellites licensed by France would promote competition in the provision of satellite services in the United States. Therefore, we find no justification for conditioning U.S. market access for the second-generation Globalstar system on analysis of competition in France (per proposed Condition (3)) or on France allowing Iridium earth stations in French territory to operate in a wider spectrum band.

### C. Dual Licensing

28. Iridium argues that Globalstar's plan to initially operate eight U.S.-licensed first-generation satellites as part of an integrated 32 satellite constellation, including 24 second-generation satellites operating under a French space-station license, is contrary to a Commission policy against "dual licensing" articulated in the DISCO II rulemaking.<sup>63</sup> Iridium cites text in the Notice of Proposed Rulemaking and the Report and Order in that proceeding where the Commission said that it would not grant "separate and duplicative" licenses for space stations that have been licensed by foreign governments.<sup>64</sup> As clearly indicated, the Commission meant that it would not grant U.S. market access for satellites already licensed by foreign countries by granting U.S. space station licenses for those satellites. The Commission stated that it would instead authorize U.S. access by foreign-licensed satellites by granting spectrum reservations in processing rounds or by granting or modifying licenses for U.S. earth stations to permit communication with the foreign-licensed satellites.<sup>65</sup> This policy does not preclude the Commission from licensing individual satellites that would operate within a larger satellite constellation that includes foreign-licensed satellites.

29. Iridium further contends that operating U.S.-licensed satellites in an integrated constellation otherwise comprised of French-licensed satellites is "unworkable" because "[i]f an interference issue were to arise or there were an orbital emergency, confusion would inevitably ensue."<sup>66</sup> We do not believe that transitional operation of such an integrated constellation will lead to an

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(Feb. 6, 2007) at 3-4 and Working Group SE of the Electronic Communications Committee SE 40 – Additional Analysis of Iridium Interference to RAS (Nov. 29, 2009) ("The updated analysis by France .... provides an estimate of the probability of interference and the expected number of affected 20 KHz channels within the RAS 1610.6-1613.8 MHz band."). There is no similar concern regarding potential interference to radio astronomy observation from Globalstar's satellite operations because Globalstar satellites do not transmit in spectrum anywhere near 1610.6-1613.8 MHz.

<sup>63</sup> Reply of Iridium Satellite LLC (May 3, 2010) at 5.

<sup>64</sup> DISCO II at ¶188; *Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Space Stations to Provide Domestic and International Satellite Service in the United States* (Notice of Proposed Rulemaking), 11 FCC Rcd 18178 (1996) at ¶¶ 13-14.

<sup>65</sup> DISCO II at ¶¶ 183-88.

<sup>66</sup> Reply of Iridium Satellite LLC at 5-6. Because Iridium raised this argument for the first time in reply to Globalstar's opposition to its petition to deny, there was no opportunity for Globalstar to address it in the course of the regular pleading cycle, and there is no comment on point of record from Globalstar.

insurmountable regulatory problem. In the event that interference is caused by operation of a satellite, or satellites, in the integrated constellation, or by transmissions from earth stations to such satellites, it would be possible to ascertain, from ephemeris data and other information obtainable from the system operators, which satellite(s) generated or received the interfering transmissions and thus whether the satellite(s) is, or are, French-licensed or U.S.-licensed. As a condition on grant of the pending applications, we will require Globalstar to provide to the Commission, upon request and as necessary to resolve any interference issues that may arise, current ephemeris data for all of its satellites and a report on the current operational status of each of them.

#### **D. Orbital Debris Mitigation**

30. Applicants for U.S. space station licenses are required to submit a report on design and operational strategies that will be used to minimize orbital debris.<sup>67</sup> U.S. earth station licensees seeking authority to access foreign-licensed space stations must also file such a report. Alternatively, as we indicated in adopting debris mitigation requirements, this disclosure requirement can be satisfied by showing that the satellite system's debris mitigation plans are subject to direct and effective regulatory oversight by the satellite system's national licensing authority. We indicated that one method of making this showing is to submit an English language version of the debris mitigation rules or regulations of the national licensing authority and to indicate the current status of the national licensing authority's review of its debris mitigation plans.

31. In a letter dated March 16, 2011, Globalstar indicates that for its second-generation satellites it is pursuing a license for space operations<sup>68</sup> under the recently effective French Space Operations Act, and submits an un-official English language translation of that law. The Act specifies an authorization process for space operations in fulfillment of obligations under United Nations treaties on outer space.<sup>69</sup> Article V of the Act indicates that authorizations may include requirements set forth for the safety of persons and property, protection of public health and the environment, and in particular to limit risks related to space debris.<sup>70</sup>

32. We conclude that the French Space Operations law and associated technical regulations will provide for direct and effective regulation of debris mitigation measures by France. Accordingly, authorization to operate U.S. earth station with the second generation Globalstar system will be effective upon successful completion by Globalstar of the French authorization process, which will result in registration of currently on-orbit second-generation satellites and commitment to register

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<sup>67</sup> See 47 C.F.R. §§ 25.114(c)(14) and 25.137(b).

<sup>68</sup> See File No. SAT-AMD-20091221-00147. Globalstar's license from ANFR appears limited by its terms to authorization of radio-frequency use, and does not address other aspects of space operations.

<sup>69</sup> See Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967), Article VI, requiring authorization and continuing supervision by the appropriate state party to the treaty of the activities in outer space of non-governmental entities; Convention on International Liability for Damage Caused by Space Objects (1972); and Convention on Registration of Objects Launched into Outer Space (1975) ("Registration Convention").

<sup>70</sup> See also "French Law on space operations, Technical Regulation" presentation by Christian Cazaux, Centre National d'Etudes Spatiales, at the 3rd European Workshop on Geostationary Satellites End of Life (January 27, 2010) (describing technical regulations concerning debris mitigation).



subsequently launched second generation satellites under the United Nations Registration Convention.

#### IV. CONCLUSION

33. We conclude that grant of the subject applications, as conditioned herein, will serve the public interest, convenience, and necessity.

#### V. ORDERING CLAUSES

34. Accordingly, pursuant to Section 309 of the Communications Act, 47 U.S.C. § 309, IT IS ORDERED that IBFS File No. SAT-MOD-20080904-00165, as amended by File No. SAT-AMD-20091221-00147 (Call Sign S2115), IS GRANTED to permit operation of Globalstar's first generation satellites consistent with the technical specifications therein, subject to the following condition:

1) Upon request and as necessary to resolve any interference issues that may arise, Globalstar shall provide to the Commission current ephemeris data for all of the satellites that it uses to provide service in the United States and a report on the current operational status of each of those satellites.

35. IT IS FURTHER ORDERED, that IBFS File Nos. SES-MOD-20081023-01403 (Call Sign: E030266), SES-MFS-20091221-01601 (Call Sign: E970381), SES-MFS-20091221-01602 (Call Sign: E990337), SES-MFS-20091221-01603 (Call Sign: E990337), SES-MFS-20091221-01604 (Call Sign: E990336), SES-MFS-20091221-01605 (Call Sign: E990335), SES-MFS-20091221-01606 (Call Sign: E050327), SES-AFS-20091221-01607 (Call Sign: E970198), SES-MFS-20091221-01608 (Call Sign: E000342), SES-MFS-20091221-01609 (Call Sign: E000343), SES-MFS-20091221-01610 (Call Sign: E000344), SES-MFS-20091221-01611 (Call Sign: E000345), SES-MFS-20091221-01612 (Call Sign: E050347), SES-MFS-20091221-01613 (Call Sign: E050346), SES-MFS-20091221-01614 (Call Sign: E050345), SES-MFS-20091221-01615, as amended by SES-AMD-20101012-01278 (Call Sign: E050097), SES-MFS-20091221-01616, as amended by SES-AMD-20101025-01328 (Call Sign: E050098), SES-MFS-20091221-01617, as amended by SES-AMD-20101025-01327 (Call Sign: E050099), and SES-MFS-20091221-01618, as amended by SES-AMD-20101025-01326 (Call Sign: E050100), ARE GRANTED, to permit operation of these earth stations with Globalstar second generation satellites, and to make other changes in operating parameters as specified in the applications, subject to the following conditions:

1) Operation shall be in compliance with any restrictions established in the course of international coordination for Globalstar second-generation satellites pursuant to ITU regulations.

2) The authority to operate granted in connection with these earth station applications shall become effective upon grant by France of an authorization for space operations under the June 3, 2008 French law n° 2008-518 relating to space operations, and only for communications with space stations for which France grants authority and undertakes to register under the United Nations Registration Convention. Globalstar shall notify the Commission immediately of any disposition by French officials of its request for such authorization. This authorization shall immediately cease in the event of denial of such request, or other action by Globalstar or France that would result in space operations by Globalstar second-generation satellites becoming no longer subject to French supervision.

36. IT IS FURTHER ORDERED that the Petition to Deny of Iridium Satellite LLC filed on May 18, 2009 and the Motion to Hold Globalstar's Applications in Abeyance, filed on December 31, 2009, ARE DENIED and that the Opposition of Iridium Satellite LLC filed on December 31, 2009 and the Petition to Deny of Iridium Satellite LLC filed on April 16, 2010 ARE DENIED except to the extent indicated herein.<sup>71</sup>

FEDERAL COMMUNICATIONS COMMISSION

Mindel De La Torre  
Chief, International Bureau

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<sup>71</sup> Globalstar's requests for interim authority for its U.S. earth stations to engage in commercial operation via second-generation satellites while its applications for permanent authority for such operation are pending will be dismissed by separate action.